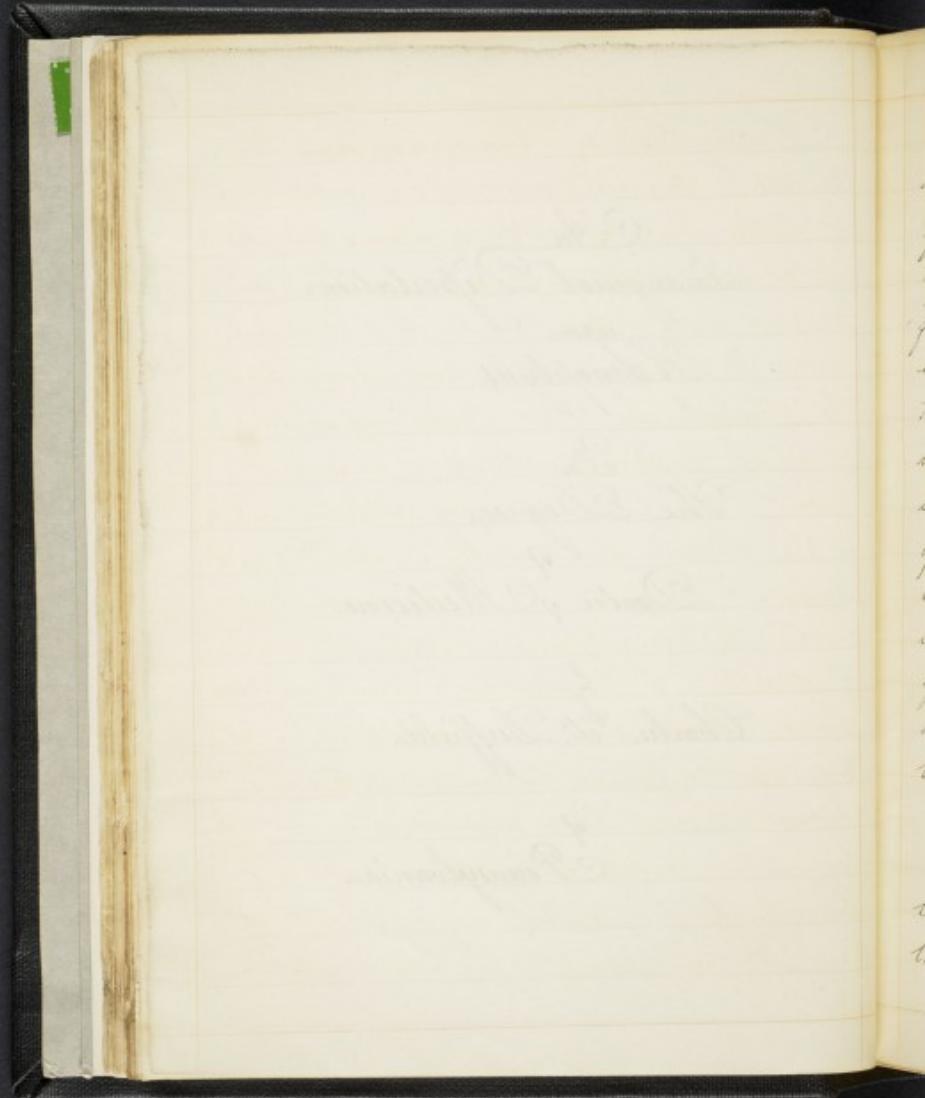


An  
Inaugural Dissertation:  
upon  
Hæmoptysis.

For  
The Degree  
of  
Doctor of Medicine.

by  
Charles W. Duffield.

of  
Pennsylvania.



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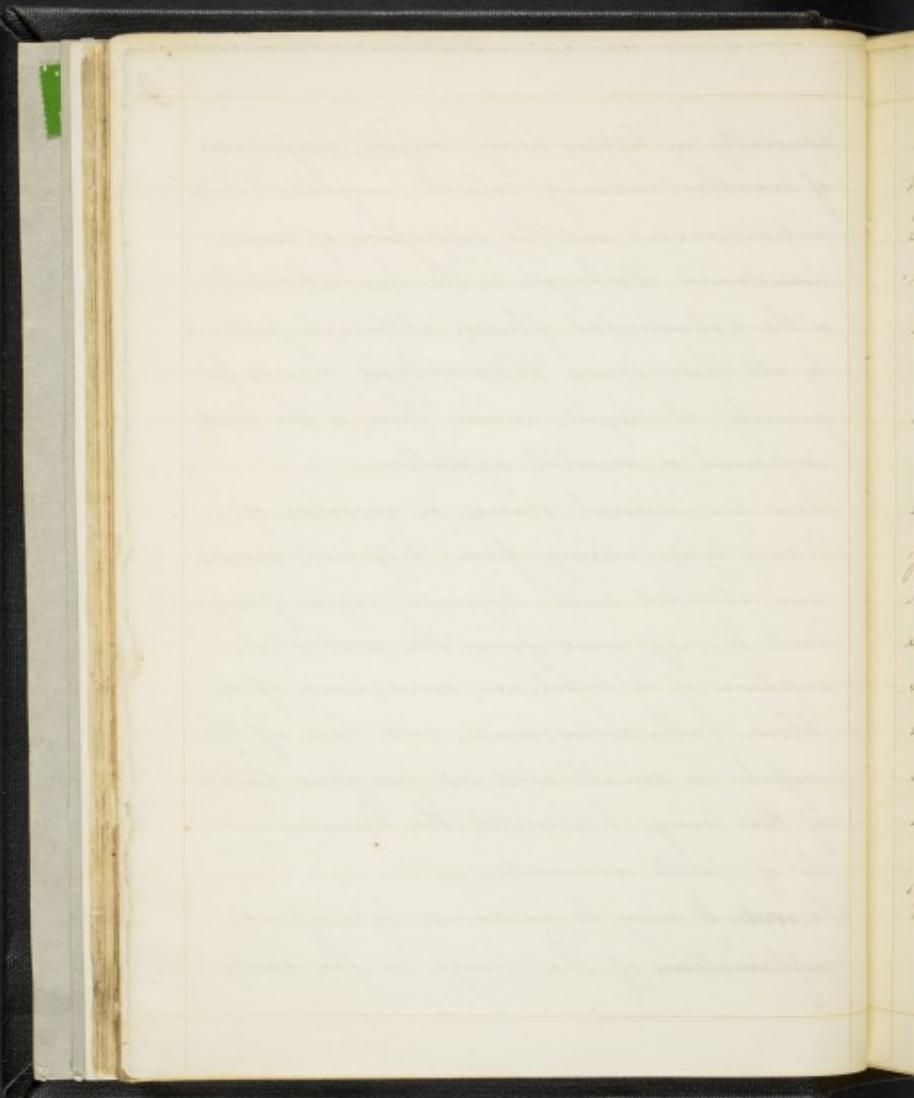
Hemoptysis or Hemorrhage from the Lungs. In this disease there is a discharge of fetid blood, of a florid colour, brought up by more or less coughing; it has been confounded with Hematemesis, but it may easily be distinguished, in hemorrhage from the stomach, the blood thrown up is generally in much greater quantities, of a darker colour, more gummy, mixed with the contents of the stomach, and usually unattended with cough. The causes which more particularly conduce to Hemoptysis, are certain peculiarities of structure, of this kind are a narrow, contracted thorax, elevated shoulders, a delicate habit of body, and sanguinous temperament; but this disposition congenital, or acquired, is excited into action, by a variety of causes, as loud, and long speaking, frequent singing, bursts of laughter, paroxysms of rage, violent exertion,



especially in lifting heavy weights, vicissitudes of weather, inducing catalepsy, irregular habits, intemperance, and the suppression of some accustomed discharge, as the hemorrhoidal, or the calaminal fluxes; although produced by all these causes, Hemoptysis occurs frequently at night, when there is the least corporeal or mental agitation.

There are several species or varieties of Hemoptysis, arising from different causes, and attended with different degrees of danger.  
First. It may arise from the accidental rupture of a vesel, in consequence of a blow, fall, or wound, and here if the vesel be small and no previous disease of the lungs has excited the hemorrhage is of little moment.

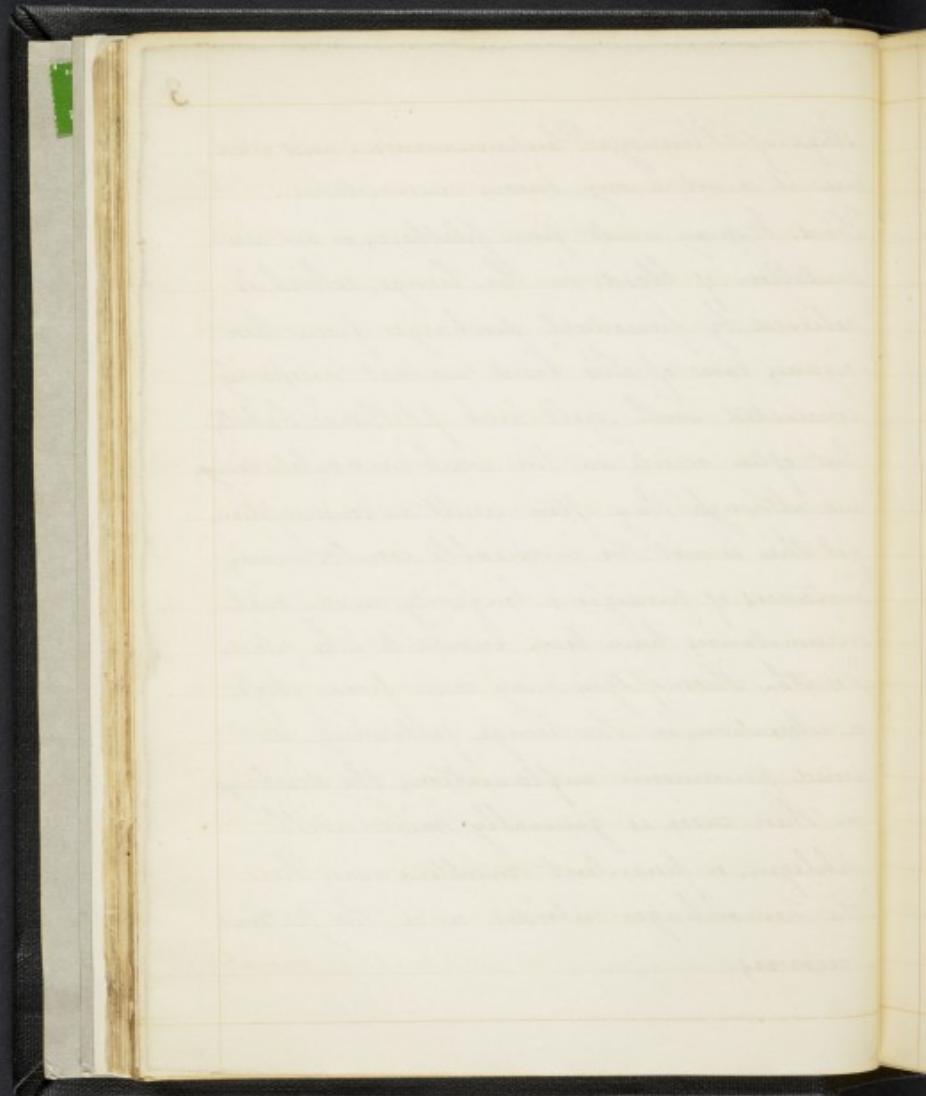
Second. It may be occasioned by excessive inflammation of the lungs, in the early



stage of Pleurisy or Pleuropneumonia, and even here it is not a very serious circumstance.

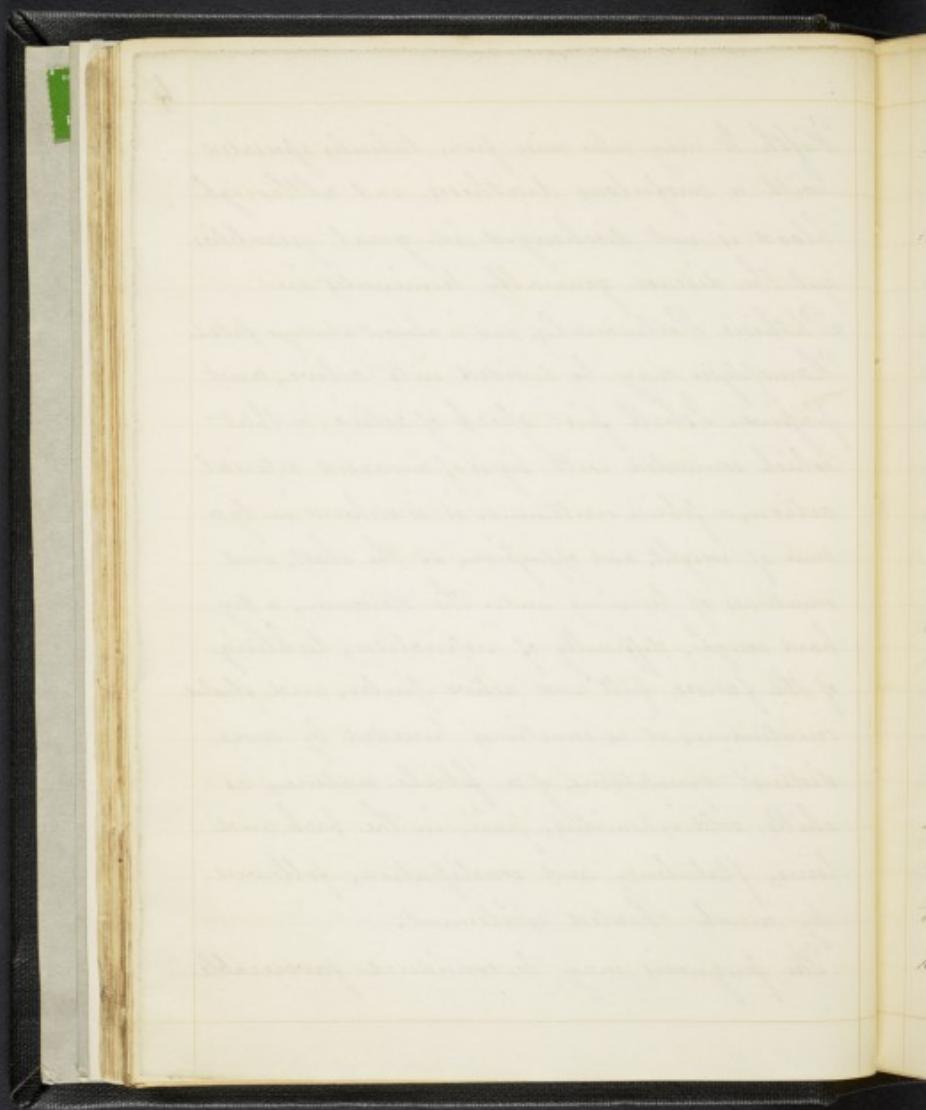
Third. It may result from plethora, or an accumulation of blood, in the lungs, which is relieved by periodical discharges from these organs; cases of this kind are not necessarily connected with full and plethoric habits, but often occur in the weak and valetudinaries, and although they often result in consumption, yet this is not the invariable result; many instances of prodigious longevity, under such circumstances have been known to take place.

Fourth. Hemoptysis may occur from abscess, or ulceration, in the lungs, following ill cured pneumonic inflammation; the discharge in these cases, is generally mixed with phlegm, or purulent matter; even here the hemorrhage subsides, and the patient recovers.



Fifth. It may also arise from tubercles associated with a serofulous diathesis, and although blood is not discharged in great quantities, yet the disease generally terminates in Phthisis Pulmonalis, and is almost always fatal. Hemoptysis may be divided into active, and passive. I shall first speak of active; or that which connected with signs of increased arterial action, or febrile excitement; it is ushered in by a sense of weight, and oppression, at the chest, and sometimes of burning under the sternum, a dry hard cough, difficulty of respiration, tickling of the fauces, full and active pulse, and flushed countenance; it is sometimes preceded by more distinct symptoms, of a febrile nature, as chills, cold extremities, pain in the back, and loins, flatulency, and constipation, followed by much heated excitement.

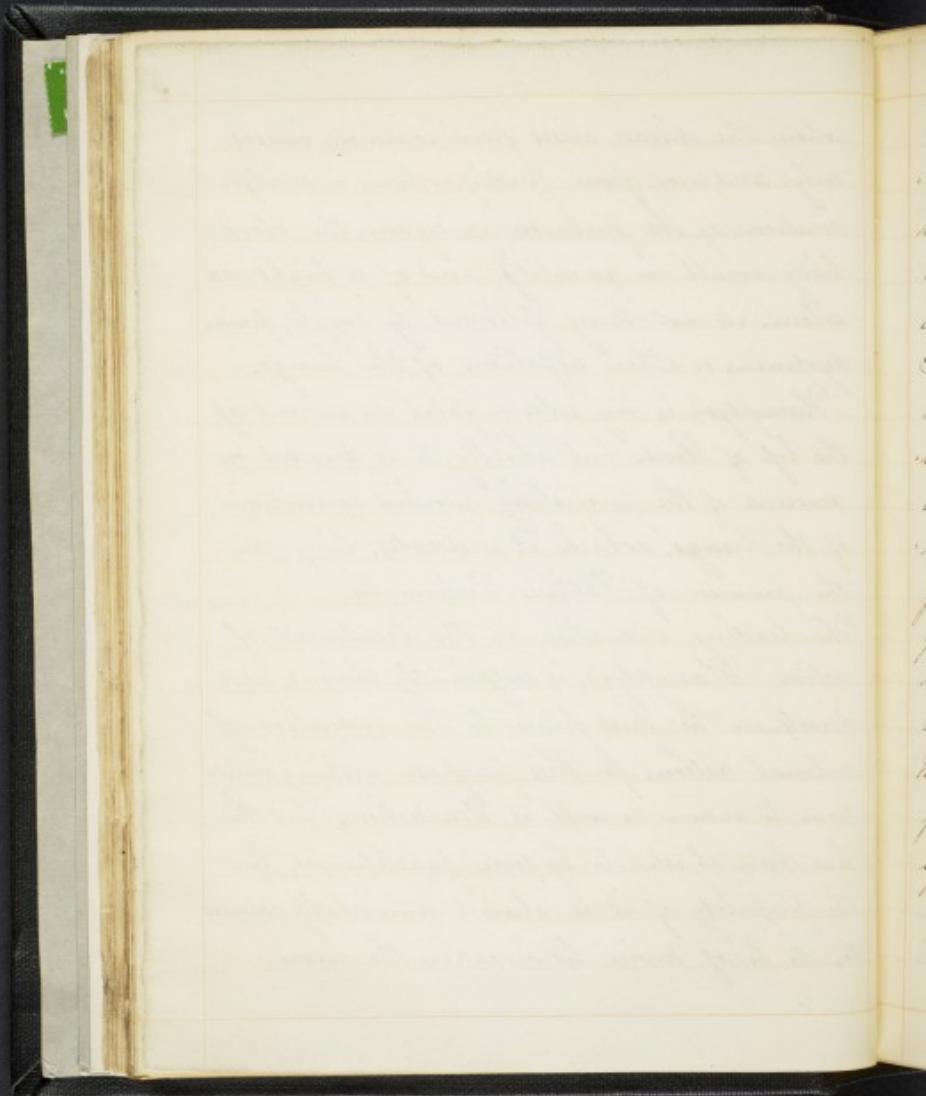
The prognosis may be considered favourable



when the disease arises from common causes only, and not from predisposition, or malformation, of the pulmonary organs, the blood being small in quantity, and of a bright red colour, its not being followed by cough, pain, dyspnoea, or other affections of the lungs.

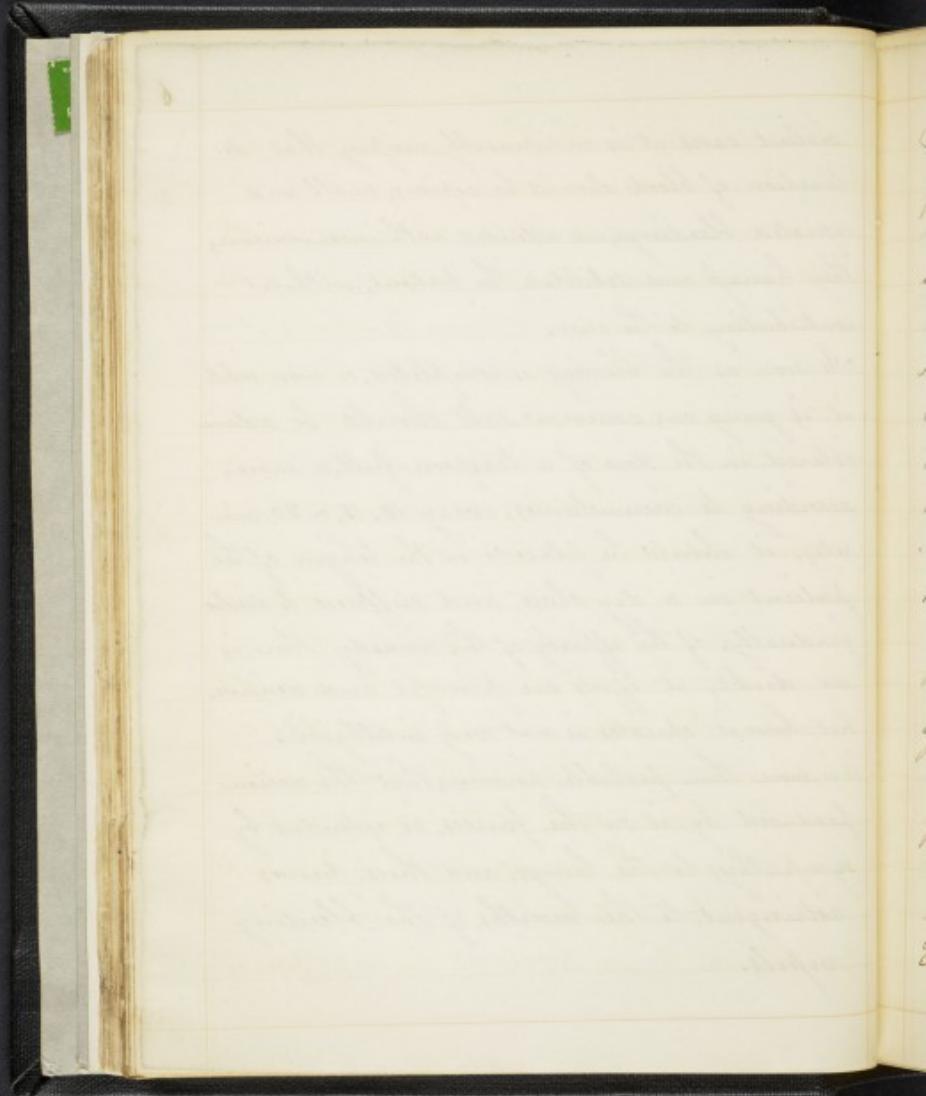
Hemoptysis is very seldom fatal on account of the loss of blood, but chiefly to be dreaded on account of the preexisting morbid condition of the lungs, which it indicates, being often the precursor of Pathesis Pulmonalis.

The leading indication in the treatment of active Hemoptysis, is sufficiently obvious, and directly, in the first place to the reduction of arterial action; for this purpose nothing would seem to answer so well as Venesection, but this has been objected to by some practitioners, but the propriety of it is almost universally conceded to, to be of service however in the more



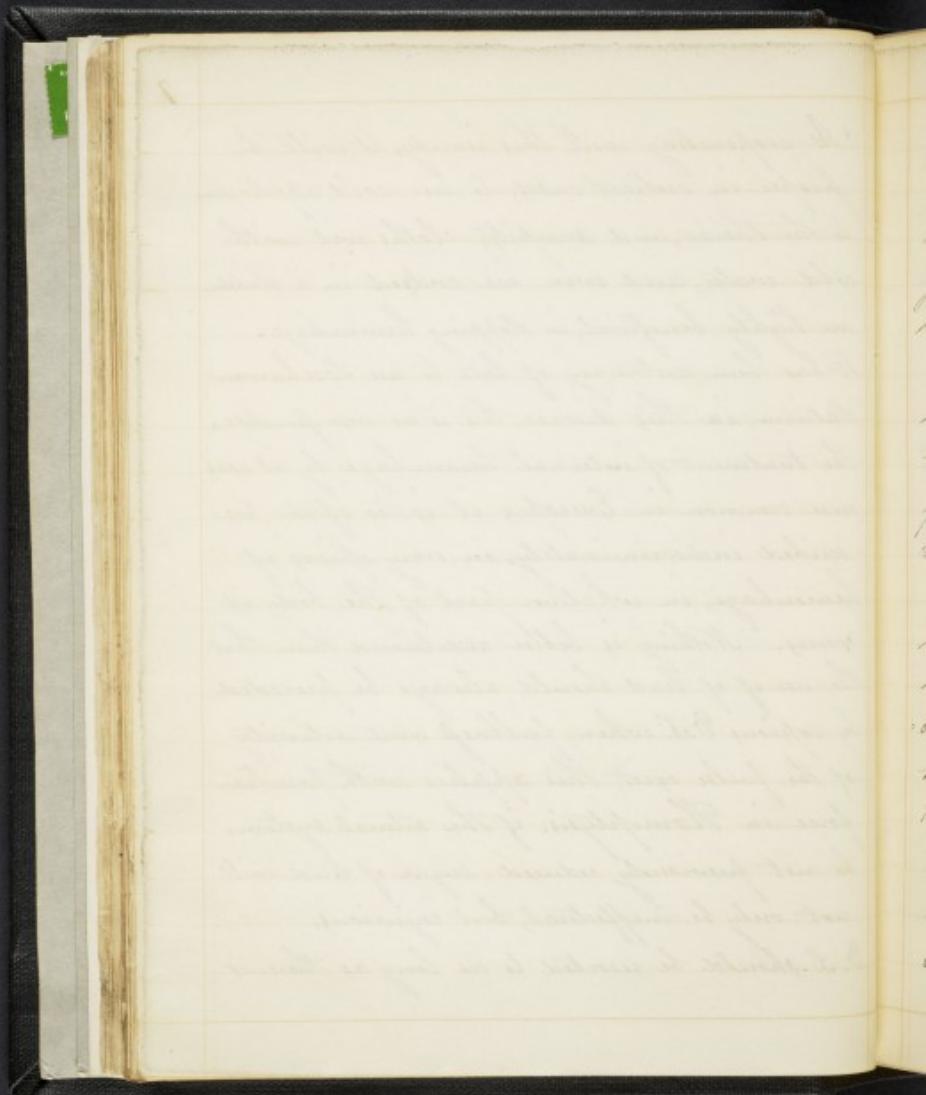
violent cases, it is indispensably necessary that de-  
traction of blood should be copious, small and  
repeated bleedings, are attended with inconvenience,  
they harass and debilitate the patient, without  
contributing to the cure.

As soon as the bleeding is completed, or even while  
it is going on; common salt should be admin-  
istered in the dose of a teaspoon full, or more,  
according to circumstances, every 10, 15, or 20 min-  
utes, it should be placed on the tongue of the  
patient in a dry slate, and suffered to dissolve  
gradually; of the efficacy of this remedy there is  
no doubt, its effects are prompt and decisive,  
but how it operates is not very intelligible.  
It is more than probable however, that the action  
produced by it on the fauces, is extended by  
sympathy, to the lungs, and there proves  
astringent, to the mouth, of the bleeding  
vesels.



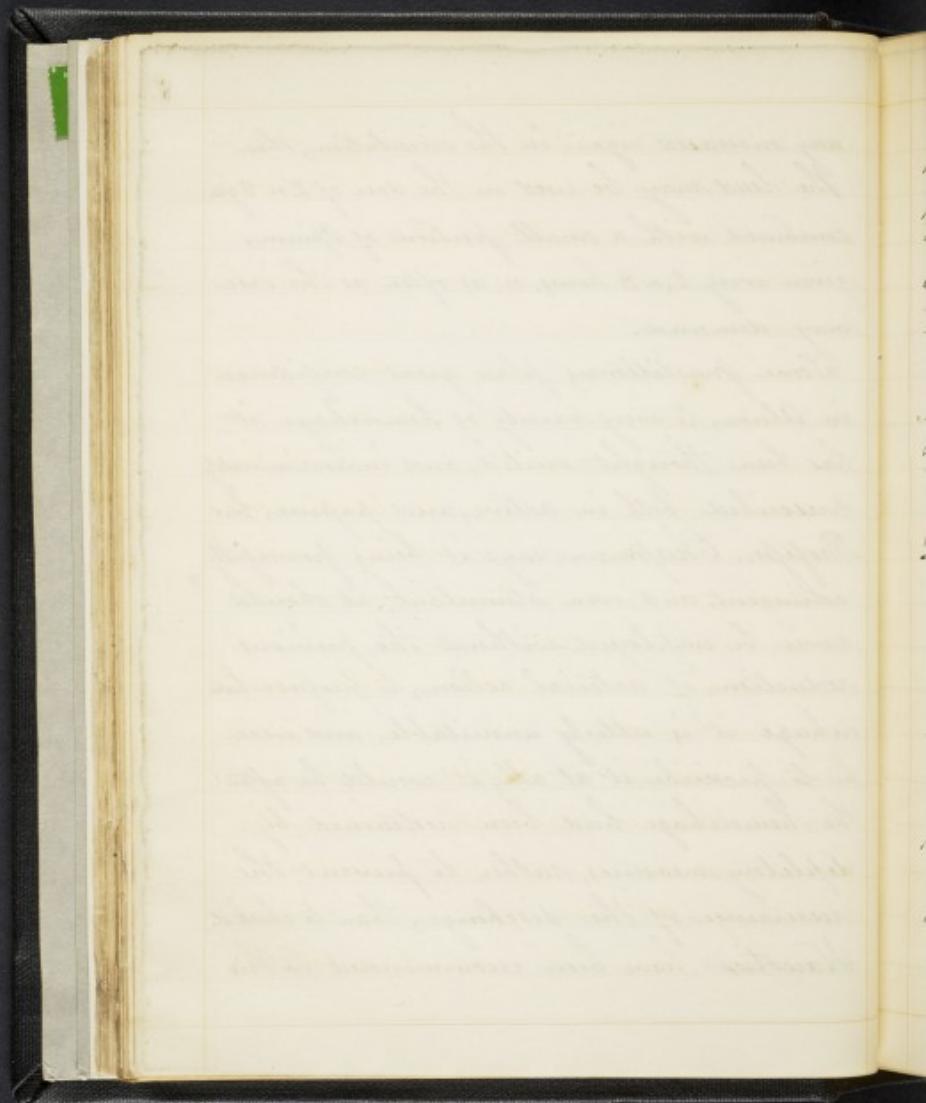
As cooperating with this remedy, it will be proper in critical cases, to use cold applications to the throat, and armpits; cloths wet with cold water, and even ice ~~ended~~ in a bladder, are highly beneficial, in stopping hemorrhage.

It has been customary of late to use Saccharum Saturni, in this disease, this is no new practice, the treatment of internal hemorrhage by it was once common in Europe; it is too often prescribed indiscriminately, in every species of hemorrhage, in whatever part of the body it occurs. Nothing is better ascertained than that the use of Lead should always be preceded by copious V.S. when fullness and activity of the pulse exist, this applies with peculiar force in Haemoptysis; if the arterial system be not previously reduced sugar of lead will not only be ineffectual, but injurious. V.S. should be resorted to as long as there is



any increased vigour in the circulation, then  
the lead may be used in the dose of 2 or 3 grs,  
combined with a small portion of Opium,  
given every 2, or 3 hours, or as often as the case  
may demand.

Some practitioners place great confidence  
in Alum, to every variety of hemorrhage it  
has been thought suited, and indiscriminately  
prescribed both in active, and passive, but  
Professor Chapman, says it being powerfully  
astringent, and even stimulant, it should  
never be employed without the previous  
reduction of arterial action, to profuse hem-  
orrhage it is utterly unsuitable, and were  
he to prescribe it at all, it would be after  
the hemorrhage had been restrained by  
depletory measures, rather to prevent the  
recurrence of the discharge, than to check it.  
Narcotics have been recommended in this



form of hemorrhage, they are obviously given to quiet irritation, and subdue arterial action, by their supposed sedative influence.

Opium may sometimes be very beneficial in cases where there exists great irritation of the pulmonary organs, attended generally with spasmodic cough, by doing away these we may succeed in many instances, of effectually terminating the hemorrhage. Digitalis has been highly extolled in active hemorrhages, by some practitioners, whilst others, think but little of it.

It is nearly half a century, since Emetics were recommended in this disease, by Doctor Bryon, Robinson, of Dublin, for a time the practice obtained considerable attention, but seems finally to have been altogether abandoned. Whatever difference of opinion may exist, as to the propriety of Emetics,



in Hemoptysis, their benefit in minute doses, is acknowledged, by almost every one, perhaps there is not one of this class of medicines, which is not beneficial when thus administered. The emetic tartar, has been much used, and with considerable advantage, but to febrile case alone if it adapted.

Precouanha in small doses, is a very important medicine in hemorrhage of almost every description, from a half grain, to a grain; combined with a small portion of opium, may be given at shorter, or longer intervals, as the necessity of the case may demand.

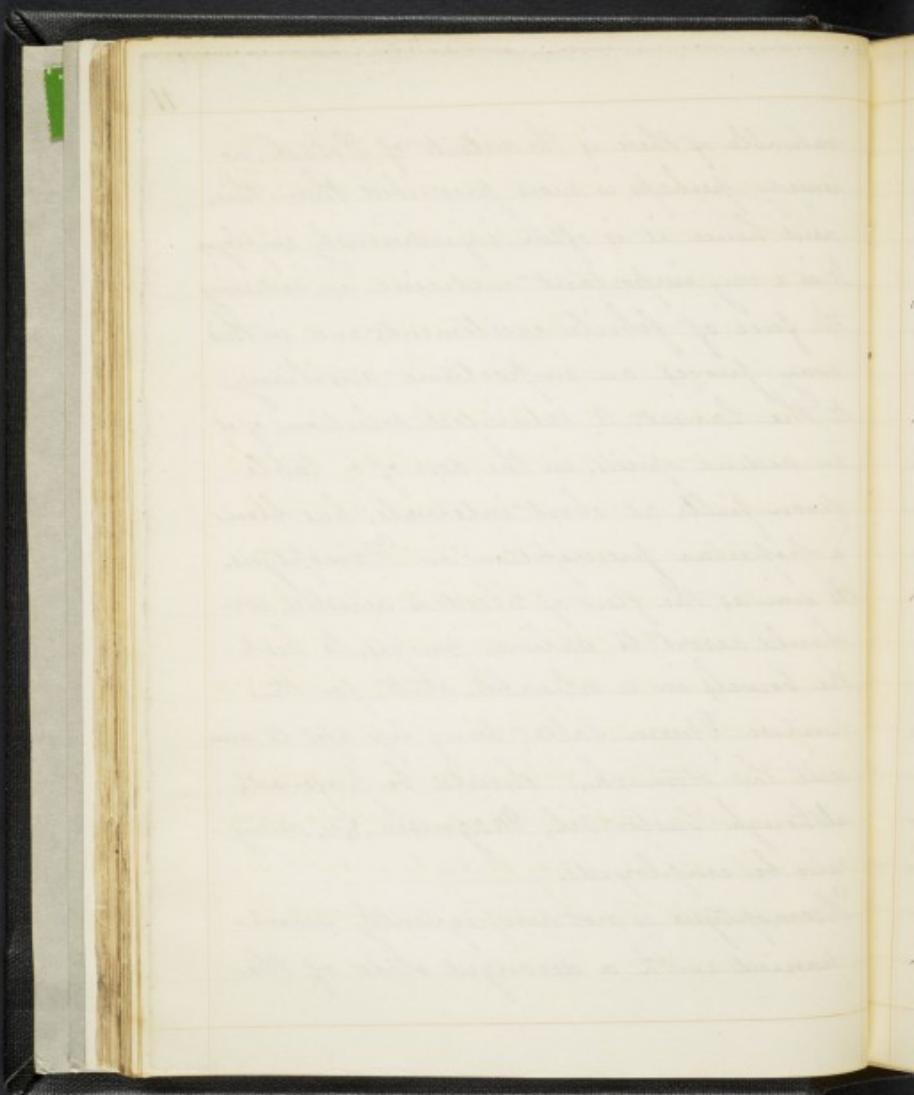
It should be given so as to create a slight degree of nausea, which is to be continued 8, or 10 hours, and sometimes longer.

Refrigerants are appropriated to the cure of Hemoptysis, the whole of the neutral salts, are of this description; but the most



valuable of these is the nitrate of Potash, no remedy perhaps is more prescribed than this, and hence it is often injudiciously employed. It is a very important medicine in reducing the force of febrile excitement; and in this war proves an important auxiliary to the lancet. A saturated solution of it in ardent spirits, in the dose of a table-spoon full, at short intervals, has been a popular prescription in Haemoptysis. As soon as the flow of blood is arrested, we should resort to saline purges, to keep the bowels in a soluble state, for this purpose Epsom Salts, (being up apt to neutralise the Stomach,) should be preferred, although Castor oil, Magnesia, &c, may also be employed.

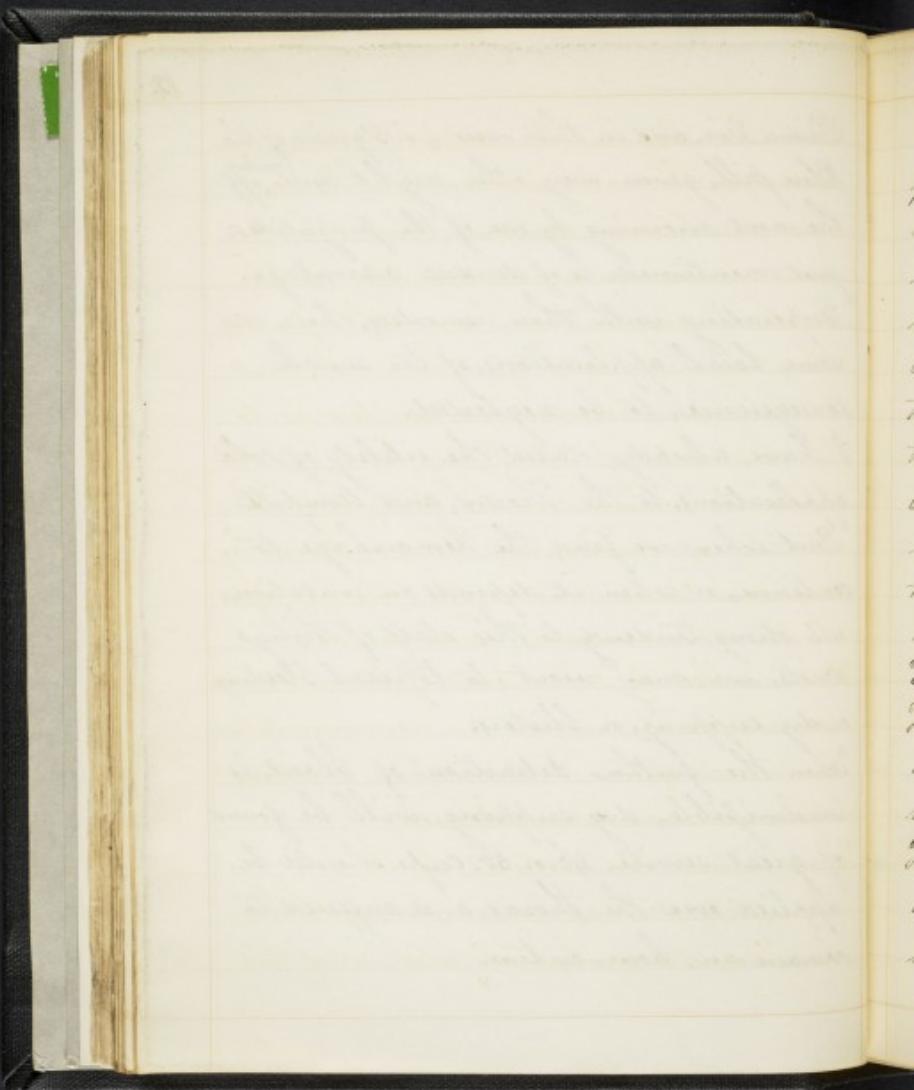
Haemoptysis is not unfrequently accompanied with a deranged state of the



Prima Via, and in these cases 4 or 5 grains, of the Blue pill, given every other night and <sup>in the</sup> off the next morning by one of the pugatists, just mentioned, is of decided advantage. Cooperating with these remedies, there are some local applications, of too much consequence, to be neglected.

I have already stated the utility of cold applications, to the Thorax, and Ampulla. But when we find the hemorrhage to continue, or when it depends on irritation, or a strong tendency, to this state of things exists, we may resort to topical bleeding, or dry cupping, or blisters;

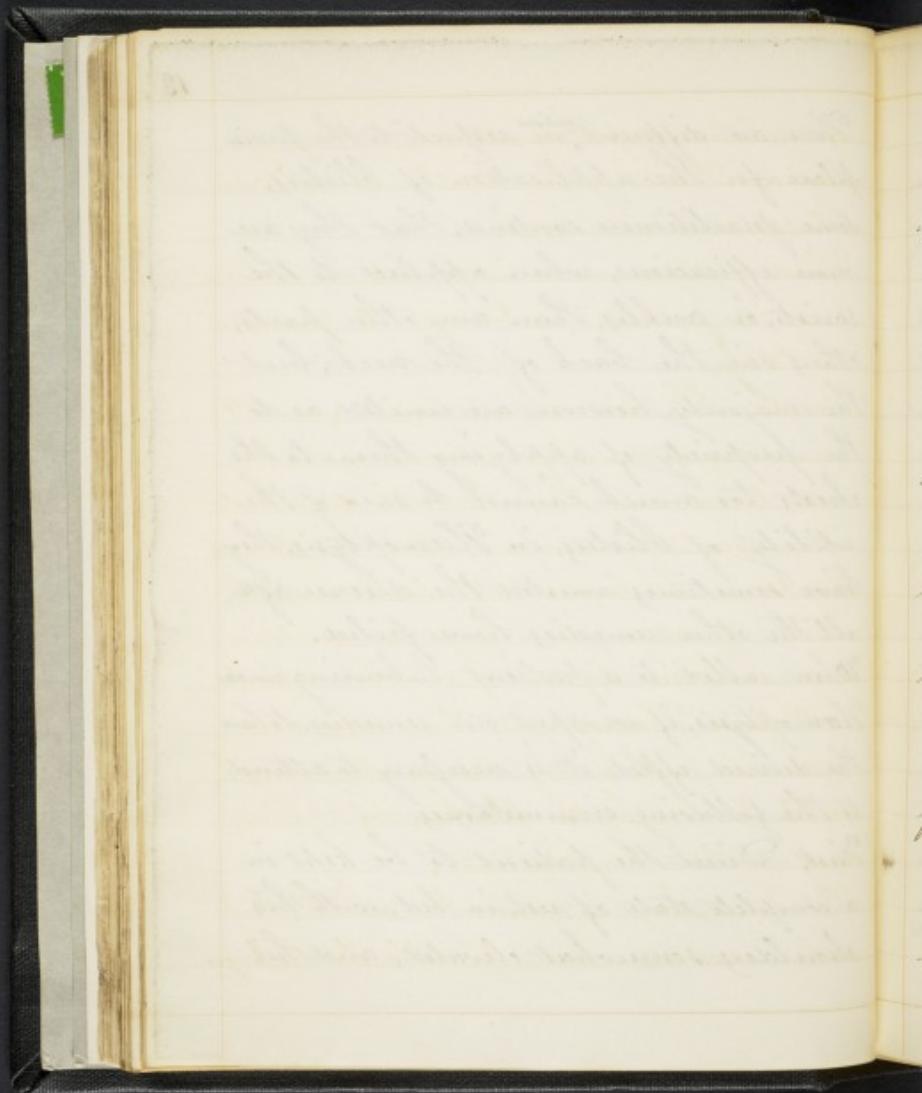
When the further abstraction of blood, is inadmissible, dry cupping, will be found of great service, 40. or 50. cups, should be applied over the Thorax, and suffered to remain an hour, or two.



There are different <sup>opinions</sup> in respect to the precise place for the application of blisters; some practitioners contend, that they are more efficacious, when applied to the wrists, or ankles, than any other parts, others say the back of the neck, but the majority, however, are united as to the propriety of applying them, to the chest; too much cannot be said of the utility of blistering, in Haemoptysis, they have sometimes arrested the disease after all the other remedies have failed.

When called to a patient labouring under Haemoptysis, if we expect our remedies, to have the desired effect, it is necessary to attend to the following circumstances.

First. Direct the patient to be kept in a complete state of rest, in bed, with his shoulders somewhat elevated, and his



extremities completely excluded.

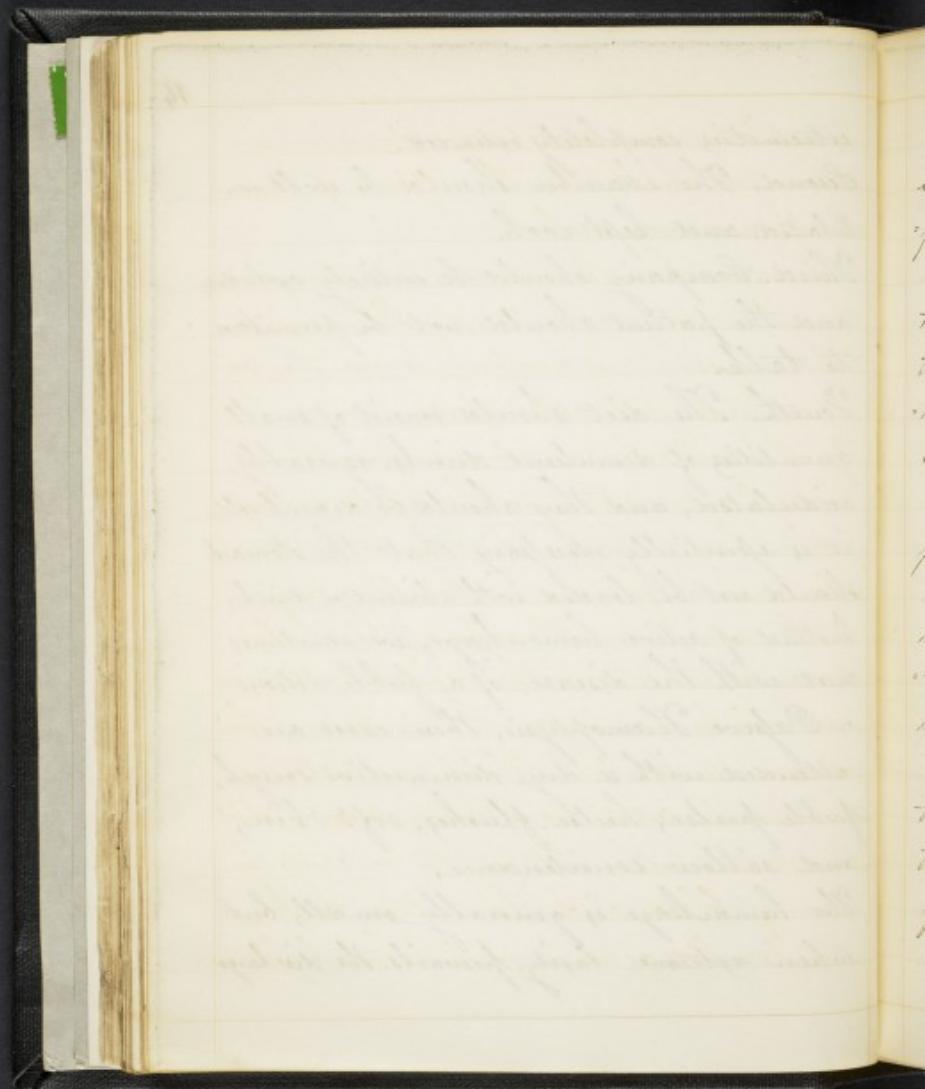
Second. The chamber should be well ventilated, and kept cool.

Third. Company should be entirely excluded, and the patient should not be permitted to talk.

Fourth. The diet should consist of small quantities of demulcent drinks, agreeably acidulated, and they should be drunk cold; it is especially necessary that the stomach should not be loaded with aliment or drink.

Instead of active hemorrhage, we sometimes meet with the disease of a feeble action, or Paroxysmal Hemoptysis, these cases are attended with a dry, diminutive cough, feeble pulse, hectic flushes, soft skin, and sallow countenance.

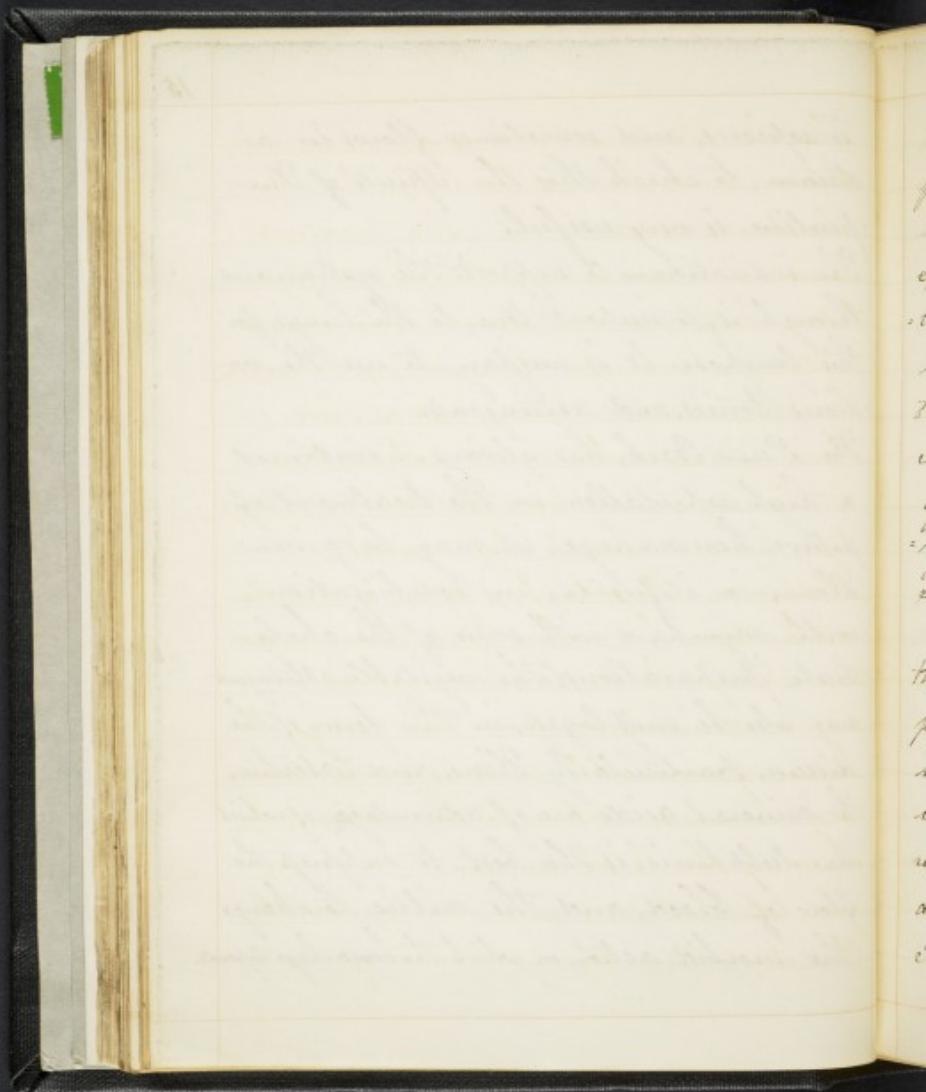
The hemorrhage is generally small, but when extreme laxity prevails, the discharge



is copious, and sometimes flows in a stream, to check this the Spirits of Turpentine, is very useful.

The indication is to support the system, and though it, to impart tone, to the lungs; for this purpose it is necessary to use the various tonics, and astringents.

The Pewter Brick, has always maintained a high reputation, in the treatment of passive hemorrhage, it may be given alone, in infusion, in combination with myrrh, or with some of the chalybeate preparations; The vegetable astringents may also be employed, in this form of the disease, particularly Kino, and Catechu, the mineral acids are of advantage, of which the Sulphuric, is the best, to suppress the flow of blood, and the nitric, to change the morbid action, on which the hemorrhage depends.



These are the principle remedies, employed in profuse hemorrhage, of the lungs, but they should be aided, by the use of moderate exercise, by a nourishing, though not stimulating diet, and such drunks, as corroborate without heating, or stimulating, the system, the best are malt liquors, and of these, Porter is preferable, by the habitual use of this article, the weaker states of Hemoptysis, have frequently been cured.

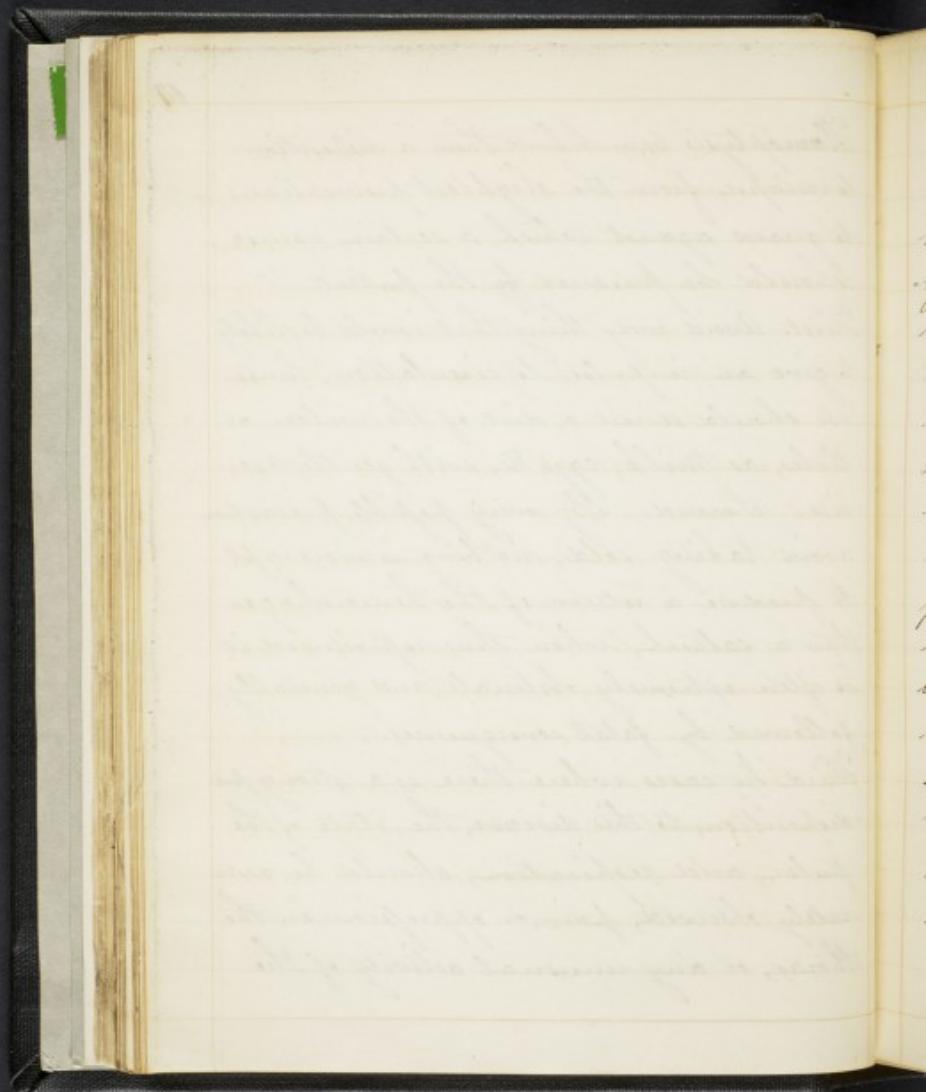
Riding on Horseback, is often of peculiar advantage, but when it is recommended, there should be no local congestion, or profuse hemorrhage, from the lungs, under favourable circumstances, a journey is of immense value, to the patient, by removing the little remnant of disease, and establishing, a new order of health. But unfortunately most cases of —



Hemoptysis leave behind them a disposition to relapse, from the slightest provocation; to guard against which, a certain course should be pursued by the patient.

First. Avoid every thing that would be likely to give an impulse to circulation, hence we should direct a diet, of the milder articles, as Milk, eggs, &c, with gentle exercise. Second. By every possible precaution avoid taking cold, nothing is more apt to produce a return of the hemorrhages than a catarrh, when thus reproduced it is often extremely obstinate, and generally followed by fatal consequences.

Third. In cases where there is a strong predisposition to this disease, the state of the pulse, and respiration, should be accurately observed, pain, or oppression, in the thorax, or any unusual activity of the



circulation, affords sufficient grounds for apprehension, and we should recommend small bleedings, and still lower diet, than previously used, complete rest, and some cooling medicine, as the neutral salts, in fact the antiphlogistic plan, should be strictly observed.

Ramphytis sometimes resists all our endeavours to cure it, in such cases, we should advise the removal of the patient, to a warmer climate, and if practicable, the removal be by sea, it is true that often fails, but there is abundant testimony to satisfy us, that cures have now and then been effected by a sea, voyage, and the effects of a warmer, and more regular, climate.

